

# **EXHIBIT P**

**FILED UNDER SEAL**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

SONOS, INC.,

Plaintiff,

vs. Case No. 3:21-CV-07559-WHA  
GOOGLE LLC,

Defendant.

-AND-

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

GOOGLE LLC,  
Plaintiff,  
vs. Case No. 3:20-CV-0675

**Defendant**

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\*\*SOURCE CODE\*\*

REMOTE VIDEOTAPED DEPOSITION BY VIRTUAL ZOOM OF  
DAN SCHONFELD, PH.D.

Friday, February 3, 2023

Reported By: Lynne Ledanois, CSR 6811  
Job No. 5698162

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1 they are not operating in standalone mode. 7:31AM	1 BY MR. SMITH: 7:35AM
2 Q So it's your position that when a Sonos	2 Q If it's not actively playing audio, is it
3 player or any player is not playing audio, it's not	3 operating in standalone mode?
4 operating in standalone mode; is that your position?	4 MR. KAPLAN: Object to form.
5 MR. KAPLAN: Object to form, compound. 7:32AM	5 THE WITNESS: If it's not actively playing 7:36AM
6 THE WITNESS: So in my opinion, when, for	6 audio, then in my opinion it's not configured to
7 example, it's -- to be specific, if we take the '966	7 play media individually consistent with the use of
8 patent, Claim 1, it states in Limitation -- I think	8 the claim language throughout, for example, Claim 2.
9 it's IV is how everybody referred to it, it says,	9 And moreover, it's not operating and
10 "wherein the first zone player is operating in 7:33AM	10 therefore cannot be viewed as operating in 7:36AM
11 standalone mode in which the first zone player is	11 standalone mode.
12 configured to play back media individually."	12 BY MR. SMITH:
13 So there is a requirement -- there is a	13 Q So if a player is not playing audio, your
14 requirement to operating in standalone mode and this	14 opinion is that it's not operating at all?
15 happens -- and the requirement for it is that the 7:33AM	15 MR. KAPLAN: Object to form, 7:36AM
16 zone -- the first zone player is configured to play	16 mischaracterizes testimony.
17 back media individually.	17 (Reporter clarification.)
18 So if there is no operation of that	18 THE WITNESS: If it is not playing audio,
19 particular zone player, it cannot in my view operate	19 it might be operating in a sense that it's on, but
20 in a standalone mode. 7:33AM	20 it's not operating in standalone mode. 7:37AM
21 Moreover, it would -- according to the use	21 BY MR. SMITH:
22 of the claim language "configured to play back media	22 Q And so if a speaker is powered off, is it
23 individually," it would also not be configured to	23 your opinion that that speaker is not operating in
24 play back media individually because the way that	24 standalone mode?
25 phrase is used is to be configured in the context of 7:34AM	25 A If it's turned off? 7:37AM

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1 the claim language, you actually have to be 7:34AM	1 Q Yes. 7:37AM
2 performing or operating in that mode.	2 A Yes, if a speaker is turned off, it's not
3 For example, if you look at Claim 2, it	3 operating in standalone mode because if it's turned
4 says that when you cease operation, you're no longer	4 off, it's not operating.
5 configured. In that case it's about the 7:34AM	5 Moreover, it is not configured at that 7:37AM
6 coordination for synchrony, but given the use of the	6 moment to play back media individually because, as I
7 word "configured" and the fact -- and how we see	7 said, configured to play back media individually
8 this continues throughout the claims, and the fact	8 requires actually playing.
9 that this is only a requirement for operating in	9 So, for example, if you look at the last
10 standalone mode, then it would be my view to 7:34AM	10 phrase of the abstract as an example, it states -- 7:38AM
11 determine -- to operate in standalone mode, you	11 I'm just going to go directly to the end, causes the
12 actually have to actively play.	12 first zone scene to be invoked such that the first
13 BY MR. SMITH:	13 zone and the second zone become configured for
14 Q Okay. So to be operating in standalone	14 synchronous playback of media.
15 mode in which a first zone player is configured to 7:35AM	15 And this is echoed in the claim language 7:38AM
16 play back media individually, it's your opinion that	16 itself as I pointed to earlier.
17 the player has to actively be playing audio; is that	17 Q Is this the interpretation of standalone
18 correct?	18 mode that you applied in your invalidity analysis?
19 MR. KAPLAN: Object to form.	19 MR. KAPLAN: Object to form, vague.
20 THE WITNESS: It is my view that if the 7:35AM	20 THE WITNESS: That is the interpretation 7:39AM
21 player is actively playing audio, then it is	21 of the claims that I applied in my invalidity
22 operating in standalone mode. And in that case,	22 analysis.
23 whatever the limitations are that follow from that	23 At times I may have made comments under my
24 in Claim 1 have to be satisfied while it's operating	24 understanding of Sonos's interpretation. I believe,
25 in standalone mode. 7:35AM	25 for example -- and I'm doing this -- we can talk 7:39AM

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<p>1 about it more specifically in a particular context. 7:39AM      2 But I believe, for example, Dr. Almeroth      3 states things that my vague recollection right now      4 is to the effect of if you're not playing music      5 before you join a group, and you remain in the mode 7:40AM      6 where you're not playing music or audio after you      7 join the group, then in his view you remain in      8 standalone mode.      9 So I may have made comments, even though I      10 disagree with that statement, to the effect that in 7:40AM      11 my view, if you adopt that principle that      12 Dr. Almeroth proposed, then the prior art systems,      13 Sonos 2005, Squeezebox system and Bose system, all      14 would meet the standalone mode criteria based on      15 silence. 7:40AM      16 And I may have made comments to that      17 effect under Sonos's interpretation.      18 BY MR. SMITH:      19 Q So if we can turn back to Paragraph 360      20 real quick. If you look at the second post, the one 7:40AM      21 that says "theboyg."      22 In that post, does that teach or disclose      23 a player operating in standalone mode prior to being      24 added to a zone scene and then that player      25 continuing to operate in standalone mode after being 7:41AM  <span style="float: right;">Page 42</span> </p>	<p>1 time it's added to a downstairs group and then 7:43AM      2 continuing to actively play audio after it's been      3 added to that group?      4 A So I would say that it doesn't completely      5 spell it out in the way that's disclosed perfectly. 7:43AM      6 But it does suggest it and a POSITA reading this would      7 understand precisely that because what it's suggesting      8 is if you have a zone scene called downstairs, it      9 includes all of the speakers downstairs.      10 And that the user is still allowed to play 7:43AM      11 to individual speakers without unlinking and,      12 therefore, when they are ready to invoke the      13 speakers downstairs, which means all of the speakers      14 downstairs in the downstairs zone scene, then they      15 simply press a button and they stop operating in 7:44AM      16 standalone mode and begin to operate in synchrony      17 with the other speakers downstairs.      18 Q Dr. Schonfeld, I want to circle back to      19 your understanding of standalone mode.      20 If a player is paused, so if the audio is 7:44AM      21 paused on a player, is that player operating in      22 standalone mode in which it is configured to output      23 audio individually?      24 MR. KAPLAN: Object to form.      25 THE WITNESS: So I would have to know the 7:45AM  <span style="float: right;">Page 44</span> </p>
<p>1 added to the zone scene? 7:41AM      2 MR. KAPLAN: Object to form.      3 THE WITNESS: Again, I think it's      4 implicitly, but in this case maybe a bit more      5 directly. 7:41AM      6 And the reason I say that is because      7 theboyg proposes creating a downstairs zone scene      8 and avoiding linking and unlinking to the zone scene      9 in order to allow him -- I presume it's him -- to      10 join and unjoin whenever they want to from the zone 7:42AM      11 scene.      12 Which means to me that once the downstairs      13 zone scene has been created, theboyg proposal would      14 like to have the option of still playing      15 individually to a particular speaker without 7:42AM      16 necessarily playing to all of the speakers      17 downstairs precisely to avoid linking and unlinking      18 to the zone scene so that you can both play      19 individually to a particular speaker and to      20 downstairs zone scene to all of the speakers 7:42AM      21 downstairs.      22 BY MR. SMITH:      23 Q Based on your interpretation of a      24 standalone mode, does this forum post describe a      25 zone player that's actively playing audio at the 7:43AM  <span style="float: right;">Page 43</span> </p>	<p>1 context of such a hypothetical situation. I'm not 7:45AM      2 sure exactly what you mean by "paused."      3 My view in general is that to operate in      4 standalone mode, you actually have to be playing      5 audio individually. 7:45AM      6 And I would say that if you were paused, I      7 would probably not consider it to be operating in      8 standalone mode. The only thing I would say is that      9 it is possible such a situation could arise, I      10 just -- I don't have enough information about such a 7:46AM      11 hypothetical. So I wouldn't be able to answer it in      12 the abstract.      13 BY MR. SMITH:      14 Q So let's go through a hypothetical. It's      15 simple here. 7:46AM      16 So I'm using the Google Home app and I      17 initiate playback on a single Google speaker. So      18 that speaker is now actively playing audio.      19 Is that speaker at that point operating in      20 standalone mode? 7:46AM      21 A A single speaker is playing audio?      22 Q Yes.      23 A If that is the only speaker playing that      24 audio, then yes.      25 Q And now I take that same speaker and I 7:46AM  <span style="float: right;">Page 45</span> </p>

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<p>1 reports in which he conducted at some point, I 11:47AM      2 believe, tests on the new version of the firmware      3 based on other speakers as well.      4 Q Did you test the new firmware on any 11:47AM      5 Chromecast devices?      6 A Not beyond the devices that were already      7 mentioned.      8 Q Now, with respect to the grouping      9 functionality provided by this new firmware, who has      10 a better understanding of how that functionality 11:48AM      11 operates, you or Ken MacKay?      12 MR. KAPLAN: Object to form.      13 THE WITNESS: I'm not sure exactly what      14 you mean by that. He has a better understanding of      15 the actual system and its implementation. And so -- 11:49AM      16 but in terms of analyzing what the system does in      17 the context of the patent, I would say me.      18 In terms of the general operation of the      19 system completely separate from the patent and just      20 how does the software work and what it does, then I 11:49AM      21 would defer to him.      22 BY MR. SMITH:      23 Q Now, if we could turn to Paragraph 47 of      24 your report. Let me know when you're there.      25 A I'm there now. 11:49AM   </p>	<p>1 A I don't know what that means. I would just 11:51AM      2 simply say from the point of view of the claims, that      3 at that point the group is no longer operating in      4 standalone mode in which the zone players, all of      5 them, are configured to play back media individually. 11:51AM      6 Q Do you understand what it means to launch      7 a speaker group in Google's system?      8 A I do.      9 Q What does that mean?      10 A Sorry, when you were saying the word 11:52AM      11 "Google," my phone started. Sorry about that.      12 It just means that you invoke the group.      13 Q And what does it mean to invoke a Google      14 speaker group?      15 A To play back in synchrony. 11:52AM      16 Q With that understanding of what it means      17 to launch a group, you would agree that a new      18 speaker group will always start in an unlaunched      19 state after its creation; is that correct?      20 A Yes. I prefer to use the terminology absent 11:52AM      21 a break. So when you create a new group, all of the      22 speakers are silent and they are waiting to be invoked      23 before they would play back in synchrony.      24 Q They are not operating in accordance with      25 the group for synchronous playback at that point; is 11:53AM   </p>
<p>Page 138</p> <p>1 Q In that first sentence you say, "A 11:49AM      2 commonality between each of these methods for      3 creating a group is that the speakers added to the      4 group no longer continue their previous activity and      5 instead either play back music (if that is what the 11:50AM      6 group was doing) or stop playback."      7 Do you see that?      8 A I do.      9 Q Now, with respect to creating a new      10 speaker group -- so not modifying a preexisting, 11:50AM      11 just creating a new speaker group, the speakers that      12 are added to a new speaker group will never be      13 playing music in accordance with the new speaker      14 group after the group is created; is that correct?      15 MR. KAPLAN: Object to form. 11:50AM      16 THE WITNESS: The word "never" throws me      17 off. But I would say that when you create a new      18 group, all members of the new group pause whatever      19 they were doing, unless they were doing nothing --      20 not paused but stop whatever they were doing unless 11:51AM      21 they were doing nothing and then join the group.      22 At that point they all are silent.      23 BY MR. SMITH:      24 Q At that point the group is in an      25 unlaunched state; correct? 11:51AM   </p>	<p>Page 140</p> <p>1 that correct? 11:53AM      2 A Before the -- before there is a command to      3 play that particular group, they are not -- at that      4 point -- they are not at that point coordinating to      5 play back in synchrony. 11:53AM      6 Q Are they operating in accordance with the      7 group at that point?      8 A They are part of the group. They are stored      9 as a group, they just need a single button press by a      10 user and they would begin to play in synchrony as a 11:54AM      11 group.      12 Q But prior to that button press by the      13 user, so after the new speaker group is created and      14 before this button press by the user to invoke the      15 group, are the players operating in accordance with 11:54AM      16 the group at that point?      17 A I don't know what that means, to operate in      18 accordance with a group. It's not a claim term and I      19 don't know exactly what you mean by that.      20 They are part of the group, they are 11:54AM      21 members of the group and they are not playing music.      22 Q But they are not operating as part of the      23 group at that point; is that correct?      24 A They are not operating at all. They are not      25 operating to play anything. They are listed as part 11:55AM   </p>

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